

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A data processing method including receiving input data containing a plurality of instruction codes, and judging whether or not a process executed based on the instruction codes contained in the received data is a malicious process, said method ~~being~~ characterized by comprising:

retrieving an instruction code related to a branch instruction from the data;
storing a branch origin address associated with the retrieved instruction code and a branch destination address associated with a branch destination of the instruction code;
judging whether or not an instruction code for calling an instruction code group for executing a predetermined process is associated with the branch destination address;
storing a call destination address of the instruction code if the instruction code is associated with the branch destination address; and
judging whether or not the stored call destination address is between the branch origin address and the branch destination address; and

concluding that the process executed based on the instruction codes contained in the data is a malicious process, when the instruction code for calling the instruction code group for executing the predetermined process is associated with the branch destination address and the call destination address of the instruction code is between the branch origin address and the branch destination address.

2. (Currently amended) A data processor including means for receiving input data containing a plurality of instruction codes, for judging whether or not a process executed based

on the instruction codes contained in the received data is a malicious process, said data processor being characterized by comprising:

means for retrieving an instruction code related to a branch instruction from the data;

means for storing a branch origin address associated with the retrieved instruction code and a branch destination address associated with a branch destination of the instruction code;

means for judging whether or not an instruction code for calling an instruction code group for executing a predetermined process is associated with the branch destination address;

means for storing a call destination address of the instruction code if the instruction code is associated with the branch destination address; and

means for judging whether or not the stored call destination address is between the branch origin address and the branch destination address; ~~and means for outputting information indicating that the data is data for executing a malicious process if the call destination address is between the branch origin address and the branch destination address, wherein~~

it is concluded that the process executed based on the instruction codes contained in the data is a malicious process, when the instruction code for calling the instruction code group for executing the predetermined process is associated with the branch destination address and the call destination address of the instruction code is between the branch origin address and the branch destination address.

3. (Currently amended) The data processor as set forth in claim 2, characterized by further comprising means for judging whether or not a predetermined character string is associated with a return address of the instruction code group, wherein if the character string is

associated with the return address, the information indicating that the data is data for executing a malicious process is outputted.

4. (Currently Amended) A data processor including means for receiving input data containing a plurality of instruction codes, for judging whether or not a process executed based on the instruction codes contained in the data received by the means is a malicious process, said data processor being characterized by comprising:

means for retrieving an instruction code for calling an instruction code group for executing a predetermined process from the data; and

means for judging whether or not a predetermined character string is associated with a return address of the instruction code group; ~~and means for outputting information indicating that the data is data for executing a malicious process if the character string is associated with the return address, wherein~~

it is concluded that the process executed based on the instruction codes contained in the data is a malicious process, when the instruction code for calling the instruction code group for executing the predetermined process is in the data and the predetermined character string is associated with the return address of the instruction code group.

5. (Currently Amended) A data processor including means for receiving input data containing a plurality of instruction codes, for judging whether or not a process executed based on the instruction codes contained in the data received by the means is a malicious process, said data processor being characterized by comprising:

means for retrieving an instruction code for calling an instruction code group for
executing a predetermined process from the data; and
means for judging whether or not an instruction code for obtaining a return address of the
instruction code group is contained in the instruction code group if the instruction code is
retrieved; ~~and means for outputting information indicating that the data is data for executing a~~
~~malicious process if the instruction code is contained in the instruction code group, wherein~~
it is concluded that the process executed based on the instruction codes contained in the
data is a malicious process, when the instruction code for calling the instruction code group for
executing the predetermined process is in the data and the instruction code for obtaining the
return address of the instruction code group is contained in the instruction code group.

6. (Canceled)

7. (Currently Amended) A computer-readable memory product storing a computer
program including ~~a step of~~ causing a computer to judge whether or not a process executed based
on input data containing a plurality of instruction codes is a malicious process, ~~characterized in~~
~~that the stored computer program comprising~~ comprises:

~~a step of~~ causing the computer to retrieve an instruction code related to a branch
instruction from the data;

~~a step of~~ causing the computer to store a branch origin address associated with the
retrieved instruction code and a branch destination address associated with a branch destination
of the instruction code;

~~a step of causing the computer to judge whether or not an instruction code for calling an instruction code group for executing a predetermined process is associated with the branch destination address;~~

~~a step of causing the computer to store a call destination address of the instruction code if the instruction code is associated with the branch destination address; and~~

~~a step of causing the computer to judge whether or not the stored call destination address is between the branch origin address and the branch destination address; and~~

~~causing the computer to conclude that the process executed based on the instruction codes contained in the data is a malicious process, when the instruction code for calling the instruction code group for executing the predetermined process is associated with the branch destination address and the call destination address of the instruction code is between the branch origin address and the branch destination address.~~

8. (New) A data processor comprising:

an input unit for inputting data containing a plurality of instruction codes;

a storing unit for storing the data input by the input unit; and

a controller capable of performing operations of,

retrieving an instruction code related to a branch instruction from the data stored in the storing unit;

storing a branch origin address associated with the retrieved instruction code and a branch destination address associated with a branch destination of the instruction code in the storing unit;

judging whether or not an instruction code for calling an instruction code group for executing a predetermined process is associated with the branch destination address;

storing a call destination address of the instruction code in the storing unit if the instruction code is associated with the branch destination address;

judging whether or not the stored call destination address is between the branch origin address and the branch destination address; and

concluding that the process executed based on the instruction codes contained in the data is a malicious process, when the instruction code for calling the instruction code group for executing the predetermined process is associated with the branch destination address and the call destination address of the instruction code is between the branch origin address and the branch destination address.

9. (New) A data processor comprising:

an input unit for inputting data containing a plurality of instruction codes;

a storing unit for storing the data input by the input unit; and

a controller capable of performing operations of;

retrieving an instruction code for calling an instruction code group for executing a predetermined process from the data;

judging whether or not a predetermined character string is associated with a return address of the instruction code group; and

concluding that the process executed based on the instruction codes contained in the data is a malicious process, when the instruction code for calling the instruction code group

for executing the predetermined process is in the data and the predetermined character string is associated with the return address of the instruction code group.

10. (New) A data processor: comprising:

an input unit for inputting data containing a plurality of instruction codes;

a storing unit for storing the data input by the input unit; and

a controller capable of performing operations of;

retrieving an instruction code for calling an instruction code group for executing a predetermined process from the data;

judging whether or not an instruction code for obtaining a return address of the instruction code group is contained in the instruction code group if the instruction code is retrieved; and

concluding that the process executed based on the instruction codes contained in the data is a malicious process, when the instruction code for calling the instruction code group for executing the predetermined process is in the data and the instruction code for obtaining the return address of the instruction code group is contained in the instruction code group.

11. (New) The data processing method according to claim 1, wherein the malicious process causes an erroneous operation in the process executed based on the instruction codes contained in the received data.